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| <b>Applicant Name</b> | Jordan, Town of                       |
| <b>Project Name</b>   | Jordan Wastewater System Improvements |

### **Project Abstract**

The Town of Jordan constructed the original sewer system in 1951; the existing lift station, force main, and lagoons were added in 1968. Deficiencies in the system were identified in the Preliminary Engineering Report (PER) prepared by a consulting engineer and adopted by the town.

The PER noted several deficiencies in the sewer system in Jordan:

- The lagoons currently discharge treated wastewater to Big Dry Creek. The discharge permit includes both interim and final effluent limitations. The discharge must comply with the final effluent limitations by April 1, 2009, but the existing system cannot meet the final limits;
- The lagoon embankments have extensive erosion from wind and ice formations; and
- The control structures for routing wastewater between the cells are either significantly deteriorated or altogether inoperable. Original construction materials for the control structure are also not compliant with current regulations.

Deficiencies noted with the existing lift station include:

- An overflow in the wet well discharges raw sewage into Big Dry Creek during power outages in direct violation of the Montana Water Quality Act. Current regulations require removal of the overflow and installation of an emergency power source;
- The wet well/dry well design presents a health and safety hazard to town personnel by creating a confined space in the dry well; and
- The lift station itself is old and nearing the end of its useful life. The steel shell of the dry well is extensively corroded and may be structurally unsound. The dehumidifier no longer works, and performance of the bubbler control system is erratic.

Concerns noted in the collection system include:

- Large sections of the collection system were originally constructed with slopes and pipe diameters less than the minimums required by current regulations; and
- Town personnel have documented four damaged areas of the collection system during routine maintenance.

The PER summarizes recommended improvements to include:

- Reconfiguring and reconstructing the existing lagoon system into a three-cell facultative lagoon that is properly sized to enhance treatment;
- Continued discharge of treated wastewater into Big Dry Creek;
- Construction of a new lift station with submersible pumps and an above-ground control building; and
- Replacement of a damaged section of the collection system.